FIG.1

CELL A

CELL B

FIG.2

FREQUENCY

TIME

CELL A

CELL B

COLLISION OF HOPPING PATTERNS

FIG.3

QUALITY

SYMBOL

DEGRADATION IN QUALITY DUE TO COLLISION

FIG.4

10 RADIO TRANSMISSION APPARATUS

TRANSMISSION DATA

11 CODING SECTION

INFORMATION OF THE NUMBER OF RETRANSMISSIONS

12 MODULATION SECTION

13 SUBCARRIER MAPPING SECTION

14 MULTIPLEXING SECTION

PILOT SEQUENCE

15 S/P TRANSFORM SECTION

16 IFFT SECTION

17 GI INSERTING SECTION

18 RF SECTION

FIG.5

20 RADIO RECEPTION SECTION

22 RF SECTION

23 GI REMOVING SECTION

24 FFT SECTION

25 DEMODULATION SECTION

26 DECODING SECTION

DECODED DATA

FIG.6

11 CODING SECTION

TRANSMISSION DATA

30 CRC ADDING SECTION

31 INTERLEAVER

32 OUTER CODING PROCESSING SECTION

33 INNER CODING PROCESSING SECTION

INFORMATION OF THE NUMBER OF RETRANSMISSIONS

FIG.7(A)~FIG.7(C) FIG.8(A)~FIG.8(C)

SYSTEMATIC BITS

FIG.7(B) FIG.7(C) FIG.8(B) FIG.8(C)

PARITY BITS

FIG.7(C) FIG.8(C)

TURBO PARITY BITS

FIG.9

26 DECODING SECTION

DEMODULATED DATA

40 45 DIVERTING SECTION

SYSTEMATIC PLUS CRC

41 TURBO DECODER

RS PARITY

TURBO PARITY

42 DEINTERLEAVER

43 COMBINING SECTION

44 BUFFER

46 47 BUFFER

48 49 50 REED-SOLOMON DECODER

51 52 53 CRC CHECK

10/550091

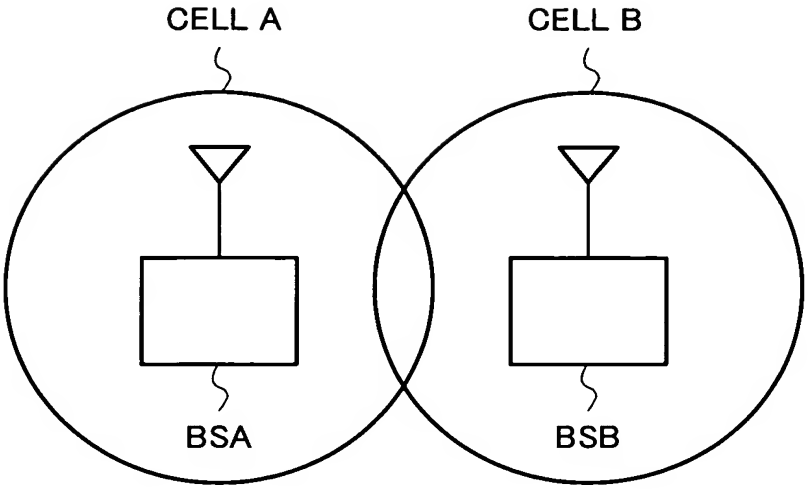

FIG.1 (PRIOR ART)

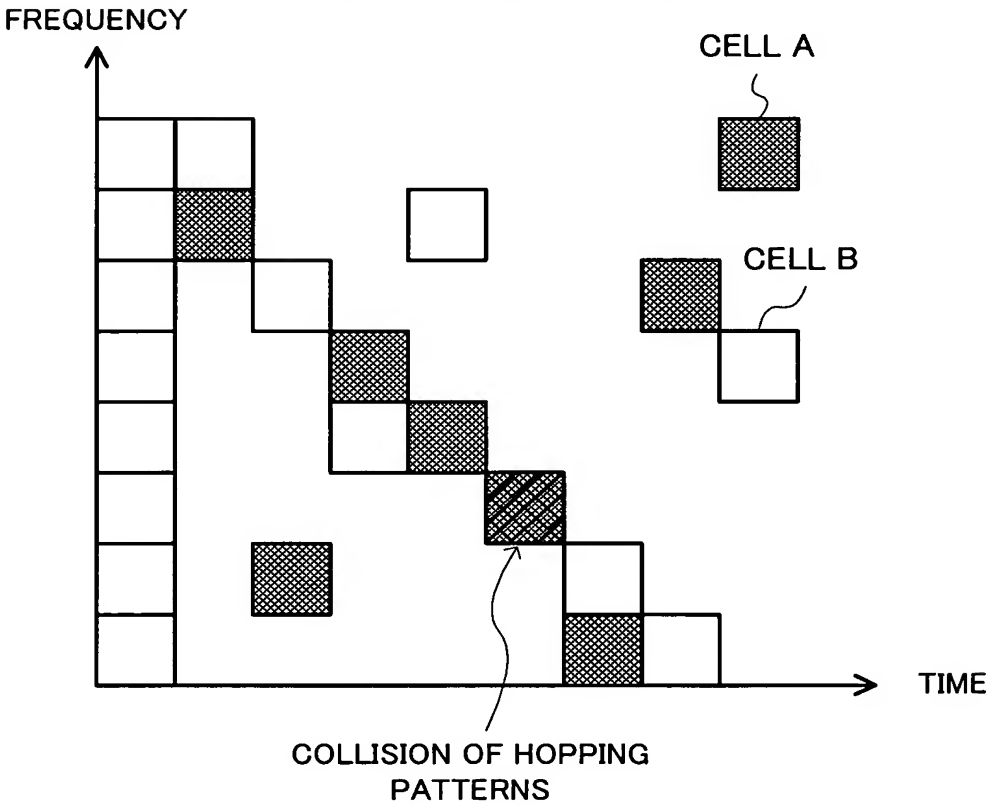

FIG.2 (PRIOR ART)

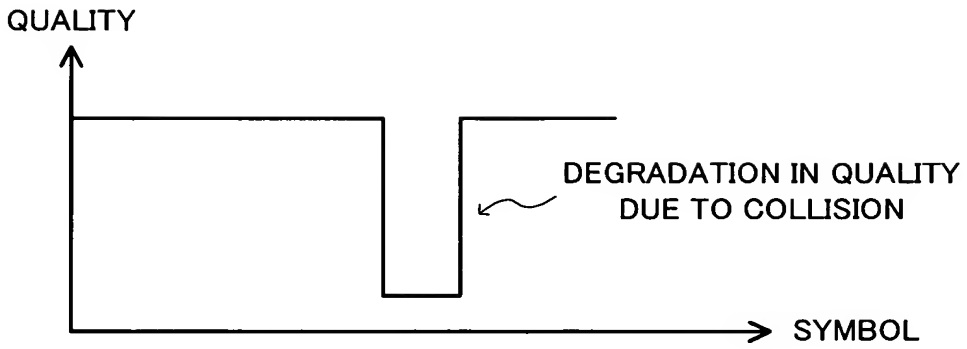

FIG.3 (PRIOR ART)

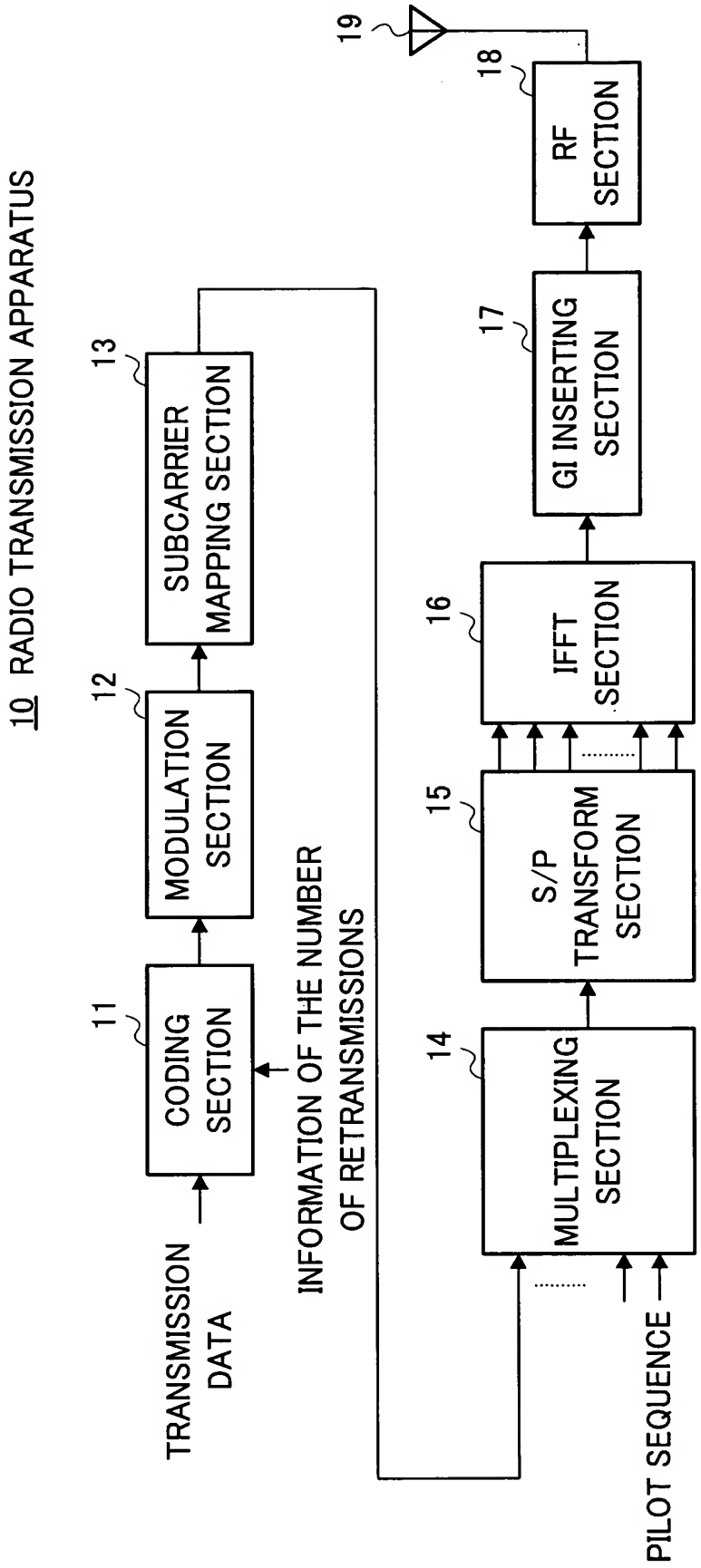
10 RADIO TRANSMISSION APPARATUS
TRANSMISSION DATA
11
CODING SECTION
12
MODULATION SECTION
13
SUBCARRIER MAPPING SECTION
INFORMATION OF THE NUMBER OF RETRANSMISSIONS
14
MULTIPLEXING SECTION
PILOT SEQUENCE
15
S/P TRANSFORM SECTION
16
IFFT SECTION
17
GI INSERTING SECTION
18
RF SECTION
19

FIG.4

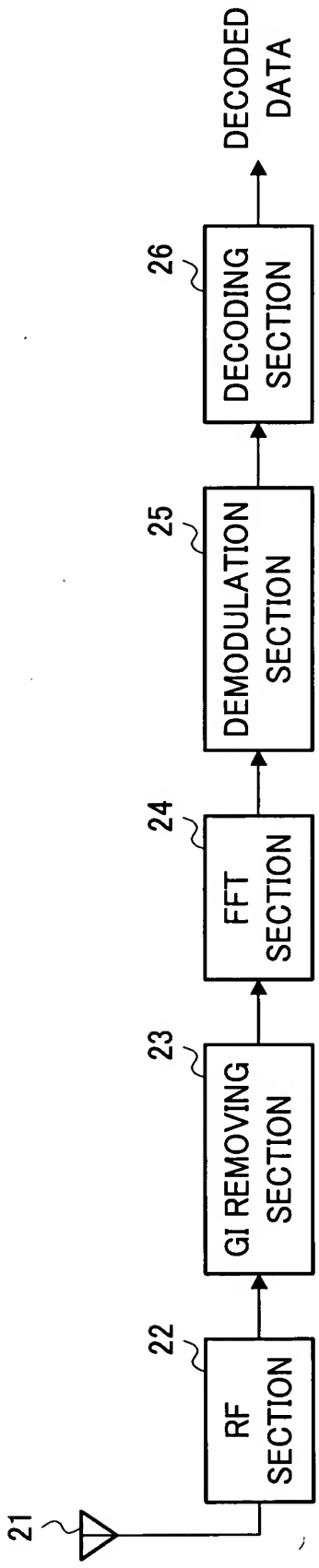
20 RADIO RECEPTION SECTION
21
22
RF SECTION
23
GI REMOVING SECTION
24
FFT SECTION
25
DEMODULATION SECTION
26
DECODING SECTION
DECODED DATA

FIG.5

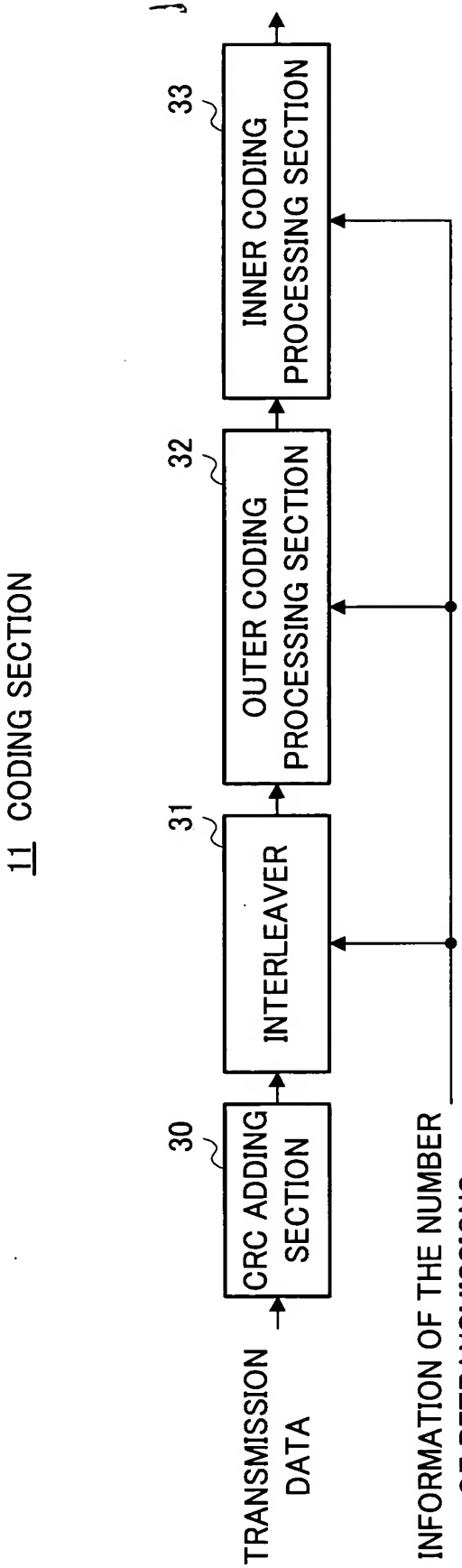
11 CODING SECTION
30
CRC ADDING SECTION
31
INTERLEAVER
32
OUTER CODING PROCESSING SECTION
33
INNER CODING PROCESSING SECTION
TRANSMISSION DATA
INFORMATION OF THE NUMBER OF RETRANSMISSIONS

FIG.6

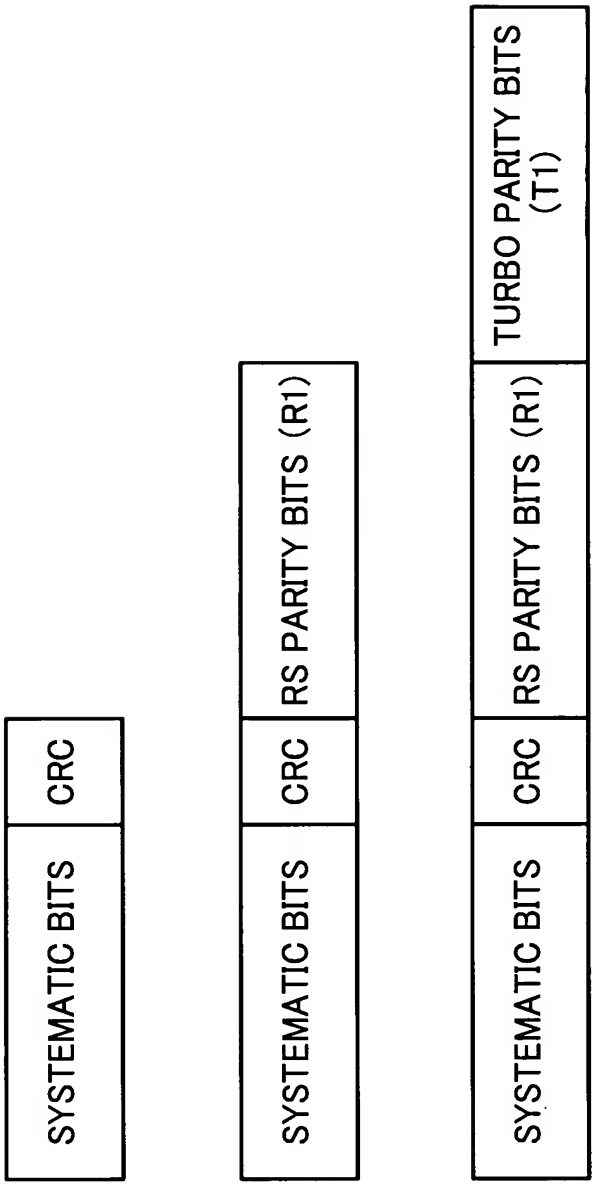

FIG.7(A)

FIG.7(B)

FIG.7(C)

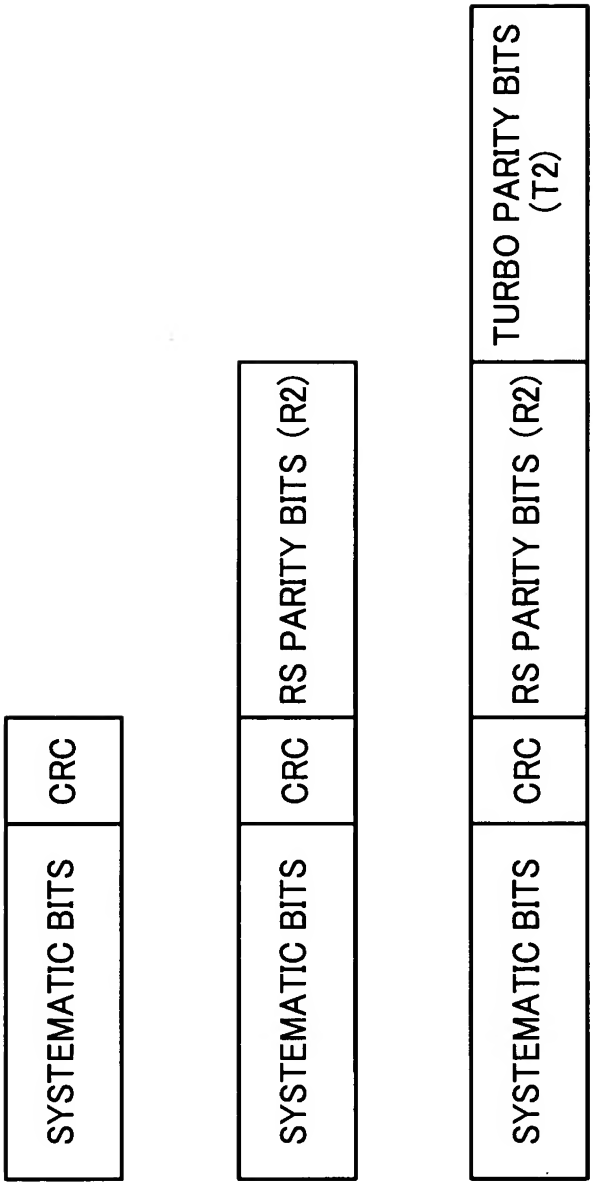

FIG.8(A)

FIG.8(B)

FIG.8(C)

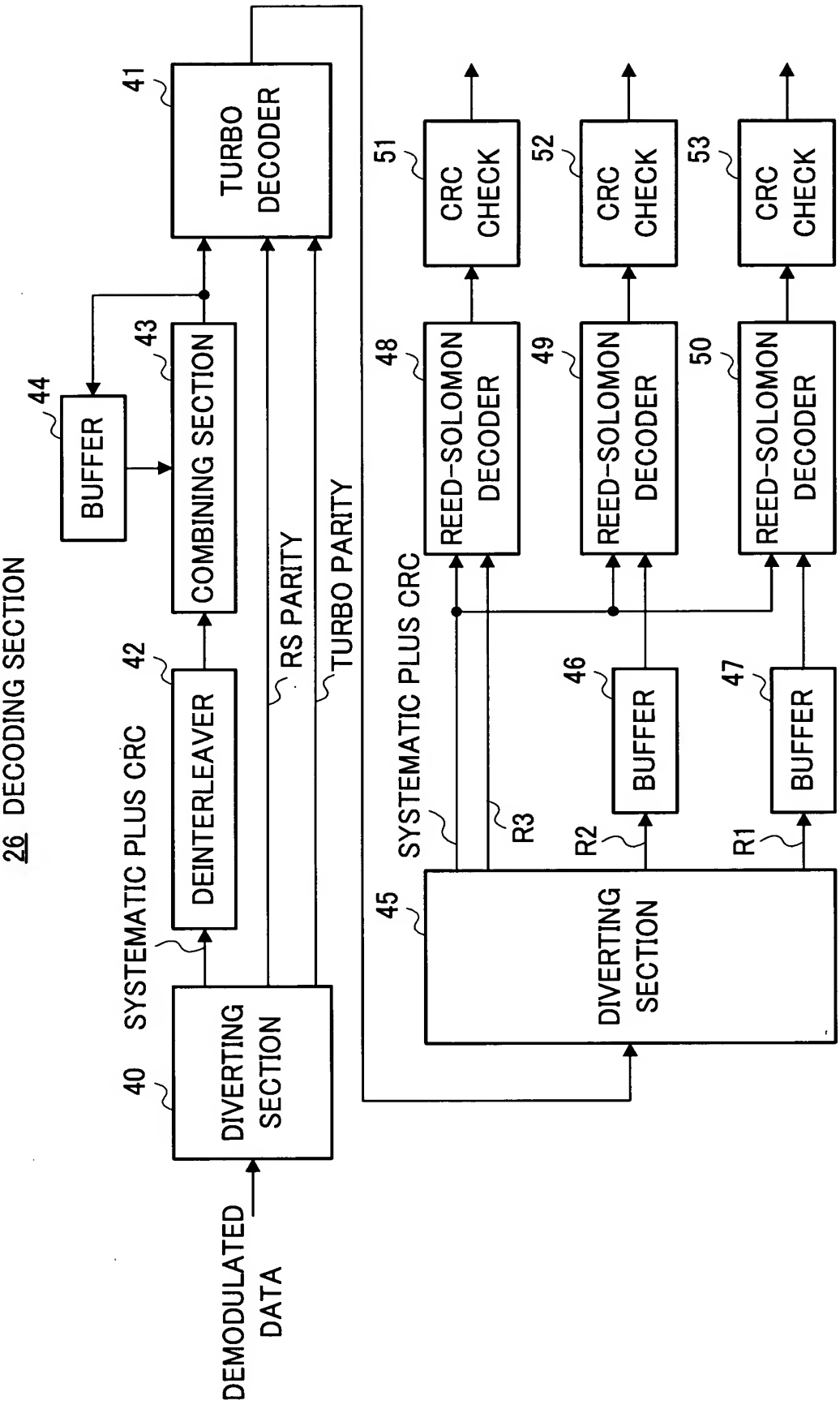
26 DECODING SECTION
DEMODULATED DATA
40 DIVERTING SECTION
SYSTEMATIC PLUS CRC
42 DEINTERLEAVER
43 COMBINING SECTION
44 BUFFER
41 TURBO DECODER
RS PARITY
TURBO PARITY
45 DIVERTING SECTION
SYSTEMATIC PLUS CRC
R3
R2
R1
46 BUFFER
47 BUFFER
48 REED-SOLOMON DECODER
49 REED-SOLOMON DECODER
50 REED-SOLOMON DECODER
51 CRC CHECK
52 CRC CHECK
53 CRC CHECK

FIG.9